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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,385	12/31/2003	Lance Weston	H0006069-555	8983

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HONEYWELL INTERNATIONAL, INC.
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EXAMINER

DINH, TUAN T

ART UNIT	PAPER NUMBER
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2841

MAIL DATE	DELIVERY MODE
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12/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/750,385

Applicant(s)

WESTON ET AL.

Examiner

Tuan T. Dinh

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 27-89 is/are pending in the application.
- 4a) Of the above claim(s) 1-12 and 27-61 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 71-75 and 85-89 is/are allowed.
- 6) ☒ Claim(s) 62-70, 76-84 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 63, 67, 72, 77, 81, and 86 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 63, lines 2-4 is unclear. What does applicant mean of "second edge of the trace and first edge of the second cap are both substantially equal to X"? Does applicant mean either the dimension or size of the second edge of the trace and the first edge of the second cap are both substantially equal to X (0.1 in).

Rejected claims 67, 72, 77, and 88 are similar to claim 63.

Please clarify.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 62-70, 76-84 are rejected under 35 U.S.C. 102(e) as being anticipated by Devoe (U.S. Patent 6,690,558)

As to claims 62, 76, Devoe discloses a high power resistor device (30; 40) as shown in figures 3A-3C comprising:

a printed circuit board (48, column 4, line 24) having a SMT component (30; 40) mounted on, the component (30; 40) having first and second end caps (14), and each caps having a first edge;

a conductive trace (46, see figure 3C) formed on the PCB (48) having first and second opposed edges extending intermediate said first and second caps (14), the edges of the trace (46) being defined a plane, see figure 3C and intersecting the first edge of the first cap (14) and intersecting the first edge of the second cap (14), the edge of the trace (46) disposed in parallel spaced relative to the edge of the first and second caps respectively.

As to claims 66, 80, Devoe discloses a high power resistor device (30; 40) as shown in figures 3A-3C comprising:

a printed circuit board (48, column 4, line 24) having first and second SMT components (30, 40) mounted on, the components (30, 40) having first and second end caps (14), and each caps having a first edge;

a conductive trace (46, see figure 3C) formed on the PCB (48) having first and second opposed edges extending intermediate said first and second caps (14), the edges of the trace (46) being defined a plane, see figure 3C and intersecting the first edge of the first cap (14) and intersecting the first edge of the second cap (14), the edge

of the trace (46) disposed in parallel spaced relative to the edge of the first and second caps respectively, and said plane intersecting said first edge of said first end cap of said second surface mounted component (40) and intersecting said first edge of said second end cap of said second surface mounted component, said first edge of said trace being disposed in parallel spaced relation to said first edge of said first end cap of said second surface mounted component and said second edge of said trace being disposed in parallel spaced

Regarding claims 63-65, 67-70, 77-79, and 81-84, Devoe does not disclose either the second edge of the trace and the first edge of the second cap substantially equal to X ($X = 0.01$ in).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have X dimension of 0.01 in equal to either the second edge of the trace and the first edge of the second cap in order to minimize size of the PCB, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose 105 USPQ 237 (CCPA 1955).

Allowable Subject Matter

5. Claims 71-75, and 85-89 are allowed.

The following is an examiner's statement of reasons for allowance: the prior arts do not teach or suggest in combination of the system having a second conductive trace on a printed circuit board having first and second opposed edges extending

intermediate first and second end caps of a third surface mount component, said first and second opposed edges of said second conductive trace being coplanar and thereby defining a plane, said plane intersecting said first edge of said first end cap of said third surface mount component and intersecting said first edge of said second end cap of said third surface mount component, said first edge of said second trace being disposed in parallel spaced relation to said first edge of said first end cap of said third surface mount component and said second edge of said second trace being disposed in parallel spaced relation to said first edge of said second end cap of said third surface mount component (claims 71 and 85).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

6. Applicant's arguments filed 10/02/07 have been fully considered but they are not persuasive.

Applicant argues:

Devoe does not disclose "a conductive trace on said printed circuit board having first and second opposed edges extending intermediate said first and second end caps, said first and second opposed edges being coplanar and thereby defining a plane, said plane intersecting said first edge of said first end cap and intersecting said first edge of said second end cap, said first edge of said trace being disposed in parallel spaced

relation to said first edge of said first end cap and said second edge of said trace being disposed in parallel spaced relation to said first edge of said second end cap ..."

Examiner disagrees because as shown in figure 3C, the traces 46 formed on the PCB having edges extending intermediate to the first and second end caps (extending on left and right sides).

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Dinh whose telephone number is 571-272-1929. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gutierrez F. Diego can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Tuan Dinh
December 12, 2007.



TUAN T. DINH
PRIMARY EXAMINER

12/12/07